

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): ~~Improvements to couplings~~ A coupling for a tooth ~~the teeth~~ of earth-moving machines, ~~comprising of the type which comprise~~ projecting lugs on the tooth ~~that can be coupled in~~ configured to couple with matching seatings of ~~a the~~ tooth holder and a transverse seating for a pin, ~~characterized in that the lugs of the tooth longitudinally have stepped guides on their upper and lower edges~~ of the lugs and which continue in ~~an the~~ area of attack in widened abutment regions to obtain greater reinforcement, ~~combined being combined~~ with matching profiles of said stepped guides and widened regions in ~~a the~~ body of the tooth holder and with an internal projecting abutment arranged in at least one of said lugs, ~~capable of being configured to be~~ guided in ~~an the~~ internal part of a corresponding straight guide of the tooth holder, said abutment, after the mounting of the tooth in the tooth holder, ~~being arranged such as~~ to retain the pin, ~~which is~~ the pin disposed in a pin seating provided in a generally vertical arrangement in the body of the tooth holder; and

wherein the lugs of the tooth are gently inclined transversely, the upper and lower edges of the lugs being in different vertical planes.

2. (currently amended): ~~Improvements~~ The coupling according to claim 1, ~~characterized in that~~ wherein the widened abutment regions have a curved shape.
3. (currently amended): ~~Improvements~~ The coupling according to claim 1, ~~characterized in that~~ wherein the widened abutment regions are in a ~~the~~ shape of an inclined plane.
4. (currently amended): ~~Improvements~~ The coupling according to claim 1, ~~characterized in that~~ wherein the widened abutment regions are in a ~~the~~ shape of a straight step.
5. (canceled).
6. (currently amended): ~~Improvements~~ The coupling according to claim 1 ~~5~~, ~~characterized in that~~ wherein the lugs of the tooth have their upper edges arranged further towards an ~~the~~ interior of the tooth than their lower edges.
7. (currently amended): ~~Improvements~~ The coupling according to claim 1, ~~characterized in that~~ wherein the lugs of the tooth ~~teeth~~ have transversely a flat or curved shape.
8. (currently amended): ~~Improvements~~ The coupling according to claim 1, ~~characterized in that~~ wherein the straight guide ~~or guides of the nose~~ of the tooth holder is

formed on a nose of the tooth holder; for the internal abutment ~~or abutments~~ of the lugs of the tooth, and extend for a length shorter than a the total length of said nose of the tooth holder, in order to obtain greater mechanical strength.

9. (currently amended): ~~Improvements~~ The coupling according to claim 1, ~~characterized in that wherein~~ the straight guide ~~or guides of the nose~~ of the tooth holder is formed on a nose of the tooth holder for the internal abutment or abutments of the lugs of the tooth and extend ~~through~~ as far as a the rear end of said nose with its open end.

10. (currently amended): ~~Improvements~~ The coupling according to claim 1, ~~characterized by the comprising an~~ arrangement of an inlet chamfer in an the opening for introduction of the pin, in order to improve ~~the~~ mounting and disassembly of the pin-latter.

11. (currently amended): ~~Improvements according to claim 1, characterized in that~~
A coupling for a tooth of earth-moving machines, comprising projecting lugs on the tooth configured to couple with matching seatings of a tooth holder and a transverse seating for a pin, the lugs of the tooth longitudinally have stepped guides on upper and lower edges of the lugs and which continue in an area of attack in widened abutment regions to obtain greater reinforcement, combined with matching profiles of said stepped guides and widened regions in a body of the tooth holder and with an internal projecting abutment arranged in at least one of said lugs, configured to be guided in an the internal part of a corresponding straight guide of the tooth

holder, said abutment, after mounting of the tooth in the tooth holder, arranged to retain the pin, the pin disposed in a pin seating provided in a generally vertical arrangement in the body of the tooth holder; and

wherein at least one of the ~~lateral~~ lugs of the tooth, which extends laterally, has a transverse aperture for inspecting the coupling of the pin and for assisting the disassembly of the pin thereof.

12. (currently amended): A tooth adapted to be connected to a tooth holder of an earth moving machine wherein the tooth holder has a protruding portion, ~~of an earth moving machine~~, said tooth having a cavity for receiving the protruding portion of the tooth holder, and protruding ears on each side of the cavity adapted to be received in corresponding housings of the tooth holder, ~~characterized in that~~ wherein said ears are inclined and the distance between the upper parts of the ears is less than the distance between the lower parts of the ears.

13. (currently amended): A tooth according to claim 12, wherein said cavity has a mouth, ~~characterized in that~~ wherein the mouth of said cavity of the tooth has a substantially trapezoidal cross section shape with the longer of the two parallel sides of the trapezoid at the bottom of said mouth.

14. (currently amended): A tooth according to claim 13, ~~characterized in that~~ wherein said protruding ears are substantially parallel with the sides of the trapezoidal mouth of the cavity.

15. (original): A tooth according to claim 12, said cavity having the inner shape and size corresponding to the outer shape and size of the protruding portion of the tooth holder, whereby said tooth fits tightly around the protruding portion.

16. (original): A tooth according to claim 12, whereby said protruding ears have respective inner parts connecting the ear to the remainder of the tooth, each of said inner parts being provided with a larger cross section area than the rest of the ear.

17. (currently amended): A tooth according to claim 16, ~~characterized in that~~ wherein the height of the inner part of the ear is larger than the height of the rest of the ear.

18. (currently amended): A tooth according to claim 16, ~~characterized in that~~ wherein the width of the inner part of the ear is larger than the width of the rest of the ear.

19. (currently amended): A tooth according to claim 12, ~~characterized in that~~ wherein each of the ears is provided with stepped guides at least at one of its upper and lower regions.

20. (currently amended): A tooth according to claim 12, whereby said tooth is adapted to be locked on the tooth holder by a retaining pin, ~~characterized in that~~ wherein at least one of said ears is provided with an inwardly protruding stop member for holding the tooth in the desired position on the tooth holder when being locked by the retaining pin.

21. (currently amended): A tooth holder adapted to be connected to an earth moving machine, said tooth holder having a protruding portion adapted to be received in a cavity of a tooth, and a housing located on each side of the protruding portion for receiving protruding ears of the tooth, ~~characterized in that~~ wherein a lateral inner surface of each of the housings, which is adapted to be facing the inner surface of the tooth ear, is inclined whereby the transverse distance between the upper part of the said housings is less than the transverse distance between the lower parts of said housings.

22. (currently amended): A tooth holder according to claim 21, said tooth holder including a body, and an inner part is provided to connect the protruding portion to the tooth holder body, said inner part having a substantially trapezoidal cross section shape with the longer of the two parallel ~~parallel~~ sides at the bottom.

23. (currently amended): A tooth holder according to claim 22, ~~characterized in that~~ wherein the inclination of said lateral inner surface of each of the housings is substantially the same as the inclination of the sides of said trapezoidal part of the protruding portion.

24. (currently amended): A tooth holder according to claim 21, ~~characterized in that~~ wherein an outer part of the protruding portion, which forms the free end of the protruding portion, and has a substantially trapezoidal cross section shape with the longer of the two parallel sides at the top.

25. (currently amended): A tooth holder according to claim 21, ~~characterized in that~~ wherein the tooth holder comprises at least one hole extending from an upper surface of the tooth holder at least to said housing, for receiving a retention pin.

26. (currently amended): A tooth holder according to claim 25, said tooth holder having a body, ~~characterized in that~~ wherein the hole for the retention pin is located in said body of the tooth holder at a predetermined distance from the protruding portion of the tooth holder.

27. (currently amended): A tooth holder according to claim 25, ~~characterized in that~~ wherein the hole for the retention pin extends substantially parallel to said lateral inner surface of said housing.

28. (currently amended): A tooth holder according to claim 25, ~~characterized in that~~ wherein the tooth holder comprises a lateral groove extending in the connection direction of the tooth and the tooth holder for receiving a stop member on the ear of the tooth.

29. (currently amended): A tooth holder according to claim 28, ~~characterized in that~~
wherein said hole for the retention pin intersects said lateral groove.

30. (currently amended): A tooth holder according to claim 21, ~~characterized in that~~
wherein each of the housings is provided with stepped guides at least at one of its upper and
lower regions.

31. (currently amended): A tooth holder according to claim 21, ~~characterized in that~~
wherein each of said housings has a rear part forming a mouth, adapted to received ears of a
tooth, said mouth being wider than the inner parts of the housing to strengthen the support zone
of the tooth holder.

32. (currently amended): A tooth system for a bucket-of an earth moving machine
comprising a tooth according to claim 12 and a corresponding tooth holder ~~according to claim 21~~
adapted to be connected to the bucket of the earth moving machine, said tooth holder having a
protruding portion adapted to be received in the cavity of the tooth, and a housing located on
each side of the protruding portion for receiving the protruding ears of the tooth, wherein a
lateral inner surface of each of the housings, which is adapted to be facing the inner surface of
the tooth ear, is inclined whereby the transverse distance between the upper part of the said
housings is less than the transverse distance between the lower parts of said housings.

33. (new): The coupling according to claim 11, wherein the widened abutment regions have a curved shape.

34. (new): The coupling according to claim 11, wherein the widened abutment regions are in a shape of an inclined plane.

35. (new): The coupling according to claim 11, wherein the widened regions are in a shape of a straight step.

36. (new). The coupling according to claim 11, wherein the lugs of the tooth are gently inclined transversely, the upper and lower edges of the lugs being in different vertical planes.

37. (new): The coupling according to claim 11, wherein the lugs of the tooth have their upper edges arranged further towards an interior of the tooth than their lower edges.

38. (new): The coupling according to claim 11, wherein the lugs of the tooth have transversely a flat or curved shape.

39. (new): The coupling according to claim 11, wherein the straight guide of the tooth holder is formed on a nose of the tooth holder, for the internal abutment of the lugs of the tooth,

and extend for a length shorter than a total length of said nose of the tooth holder, in order to obtain greater mechanical strength.

40. (new): The coupling according to claim 11, wherein the straight guide of the tooth holder is formed on a nose of the tooth holder for the internal abutment or abutments of the lugs of the tooth and extend as far as a ~~the~~ rear end of said nose with its open end.

41. (new): The coupling according to claim 11, comprising an arrangement of an inlet chamfer in an opening for introduction of the pin, in order to improve mounting and disassembly of the pin.